Hurdle Rates Literature Review

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We compare rates of return in order to allocate our capital for maximum return. Is there a minimum hurdle rate we should use?

Making Rates Of Return Comparable
Each project's expected rate of return is masked by environmental risks. The shared risks we do not care about – e.g. comets destroying Earth – while the remaining we want to enumerate.

For example, JP Morgan and Santander differ in terms of: unit of account, and the economies where they operate. In order to compare them, we have to remove the effects of the US Dollar and Euro, and the differing growth rates of the economies in US, Europe, and South America.

Hurdle Rates
Technically, the first hurdle is the Weighted Average Cost of Capital (WACC), i.e. we need to earn more than it costs to acquire the capital. However, WACC is zero when the debt-free individual looks to invest their saved capital.

The second is opportunity cost – could our funds be better used elsewhere? This presumes an understanding of the opportunities which are available now, and which will appear in the future.

Historically-informed Opportunity Cost
Assuming that future decades will look like the past allows one to create a moving average of the investment vehicle's yield.[1] The hurdle rate is simply the current value of the moving average.

Market Yield
Alternatively, instead of looking internally to determine the hurdle rate, we can observe what others have paid for earnings and deduce the collective hurdle rate.[2] Granted, this measure seems better used as a gauge of investor sentiment: as investors grow over-confident, this hurdle rate will fall, lowering the bar to investments when we should be pulling in our horns.

Since market cycles take approximately 6 years,[3] a useful indicator might be the current implied equity risk premium ($ierp$) relative to its 20-year history, i.e. $\frac{ierp_{now}}{max(ierp)-min(ierp)}$

Another possible improvement is to use inflation or Moody's AAA rate, as the market for sovereign debt has changed[4] due to the increasing equity requirements of the Basel Accords.[5]

Observed Risk-adjusted Hurdle Rates
Practitioners use varied hurdle rates to account for risk. For example, Ben Graham doubled the Moody's AAA rate,[6] while Warren Buffett uses 15%.[7] Both have noted the significant uncertainty in determining potential returns, and use the relatively high hurdle rates in order build in a 'margin of safety'.

Note that Poterba and Summers found that CEOs of US companies (Fortune 1000) had an average hurdle rate of 12.2%[8] – in constant dollars, i.e. discounted for inflation.

Summary
Practitioners have much higher hurdle rates than the market's average investor. As of 2017-05-01, the S&P500's earnings yield was 4.51%,[9] while practitioners would have a range of 7.74[10] - 15%.

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1 Damodaran, Aswath. Estimating Hurdle Rates. http://www.webcitation.org/6qrJdDNtL pp 99-101

2 ibid. pp 105-8

3 Mackenzie Investments. Bull and Bear Markets. http://www.webcitation.org/6qrJQ2eWh – 52 months per bull + 14 months per bear = 66 / 12 = 5.5 years

4 Arslanalp, S. & Tsuda, T. IMF Econ Rev (2014) 62: 430. doi:10.1057/imfer.2014.20

5 https://en.wikipedia.org/wiki/Basel_III

6 John Train, The Midas Touch, ISBN = 1906659184 – search for "Graham's Five Value Criteria"

7 High-powered Investing all-in-one for Dummies, ISBN = 1118724674 – search for "15 percent rule"

8 Poterba, James M; Summers, Lawrence H. Sloan Management Review; Cambridge, Mass.37.1 (Fall 1995): 43.

9 Damodaran, Aswath. Earnings Yield. http://www.webcitation.org/6qrKmm36z

10 2 * Moody's AAA. http://www.webcitation.org/6qrL4B0ZS